#### REMARKS

Applicants respectfully request reconsideration of the present U.S. patent application. Claims 1, 2, 4-6, 8 and 10 stand rejected under 35 U.S.C. § 102. Claims 3 and 9 stand rejected under 35 U.S.C. § 103. Claim 7 is objected to, but would be allowable if rewritten in independent form. Claims 1 and 3 have been amended. No claims have been added or canceled. Therefore, claims 1-10 remain pending.

# Claim Rejections - 35 U.S.C. § 102

Rejections of Claims 1, 2, 4-6, 8 and 10 based on Koehl

Claims 1, 2, 4-6, 8 and 10 were rejected under 35 U.S.C. § 102 as being anticipated by U.S. Patent No. 6,483,954 issued to Koehl et al. (*Koehl*). For at least the following reasons, Applicants submit that *Koehl* does not anticipate claims 1, 2, 4-6, 8 and 10.

Amended claim 1 recites the following:

wherein said signal and ground conductors have a direction of signal propagation associated therewith, and wherein related transitions of said signal and ground conductors between said submount and said optical substrate are separated along said direction by a predetermined distance, wherein said predetermined distance is based on a shortest wavelength (WLmin) that propagates along said signal and ground conductors.

Koehl discloses an optical switch that includes an optical switching device disposed in a semiconductor substrate layer. See col. 3, lines 8-11. The optical switch also includes trench capacitors disposed in the semiconductor substrate layer, and conductors coupled to the trench capacitors and the semiconductor substrate layer. See Fig. 1; and col. 3, lines 37-42 and 50-61.

Koehl does not disclose signal and ground conductors that have a direction of signal propagation associated therewith, wherein related transitions of said signal and

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App. No. 10/731,253 Docket No. Freund 75-23 ground conductors between a submount and an optical substrate are separated along said direction by a predetermined distance, wherein said predetermined distance is based on a shortest wavelength (WLmin) that propagates along said signal and ground conductors.

Thus, *Koehl* fails to disclose at least one limitation of claim 1. Consequently, claim 1 is not anticipated by *Koehl* for at least the reasons set forth above. Applicants therefore respectfully request that the Examiner withdraw the rejection of claim 1 under 35 U.S.C. § 102.

Claims 2, 4-6, 8 and 10 depend from claim 1. Because dependent claims include the limitations of the claims from which they depend, Applicants submit that *Koehl* does not anticipate claims 2, 4-6, 8 and 10 for at least the reasons set forth above. Applicants therefore respectfully request that the Examiner withdraw the rejection of claims 2, 4-6, 8 and 10 under 35 U.S.C. § 102

## Claim Rejections - 35 U.S.C. § 103

#### Rejections of Claims 3 and 9 based on Koehl

Claims 3 and 9 were rejected under 35 U.S.C. § 103 as being unpatentable over *Koehl*. For at least the reasons set forth below, Applicants submit that claims 3 and 9 are not rendered obvious by *Koehl*.

As explained above, *Koehl* does not disclose signal and ground conductors that have a direction of signal propagation associated therewith, wherein related transitions of said signal and ground conductors between a submount and an optical substrate are separated along said direction by a predetermined distance, wherein said predetermined distance is based on a shortest wavelength (WLmin) that propagates along said signal and ground conductors, as recited in claim 1. Claims 3 and 9 depend on claim 1. Because

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App. No. 10/731,253 Docket No. Freund 75-23 Examiner: J. Doan Art Unit: 2874 dependent claims include the limitations of the claims from which they depend,

Applicants submit that claims 3 and 9 are not rendered obvious by *Koehl* for at least the reasons set forth above with regard to claim 1. Applicants therefore respectfully request that the Examiner withdraw the rejection of claims 3 and 9 under 35 U.S.C. § 103.

### Allowable Subject Matter

Claim 7 was objected to as being dependent upon a rejected base claim, but would be allowed if rewritten in independent form to include the limitations of the base claim and any intervening claims.

As explained above, *Koehl* does not disclose signal and ground conductors that have a direction of signal propagation associated therewith, wherein related transitions of said signal and ground conductors between a submount and an optical substrate are separated along said direction by a predetermined distance, wherein said predetermined distance is based on a shortest wavelength (WLmin) that propagates along said signal and ground conductors, as recited in claim 1. Claim 7 depends from claim 1. Because dependent claims include the limitations of the claims from which they depend,

Applicants submit that although not rewritten in independent form to include the limitations of the base claim and any intervening claims, claim 7 is in a condition for allowance for at least the reasons set forth above with regard to claim 1.

### CONCLUSION

For at least the foregoing reasons, Applicants submit that the rejections have been overcome. Therefore, claims 1-10 are in condition for allowance and such action is

53 -9- Examiner: J. Doan 175-23 Art Unit: 2874 respectfully solicited. The Examiner is respectfully requested to contact the undersigned by telephone if such contact would further the examination of the present application.

Respectfully submitted,

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